



STIC Search Report

EIC 3600

STIC Database Tracking Number: 107708

To: Patricia Volpe
Location: 3B49
Art Unit : 3600
Wednesday, June 22, 2005

Case Serial Number: 10/626553

From: Etelka R. Griffin
Location: EIC 3600
KNOX/4B68
Phone: 571-272-4230

Etelka.griffin@uspto.gov

Search Notes

Pat# 5704720

Source: [Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Patents](#) > [U.S. Patents](#) > [Utility, Design and Plant Patents](#) 

Terms: **patno=5704720** ([Edit Search](#))

553584 (08) 5704720 January 6, 1998

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

5704720

* [GET 1st DRAWING SHEET OF 5](#)

[Access PDF of Official Patent *](#)

[Check for Patent Family Report PDF availability *](#)

* Note: A transactional charge will be incurred for downloading an Official Patent or Patent Family Report. Your acceptance of this charge occurs in a later step in your session. The transactional charge for downloading is outside of customer subscriptions; it is not included in any flat rate packages.

[Link to Claims Section](#)

January 6, 1998

Sliding bearing

APPL-NO: 553584 (08)


FILED-DATE: February 26, 1996

GRANTED-DATE: January 6, 1998

CORE TERMS: sliding, peak, groove, rotating, shaft, height, measured, resistance, helical, oil ...

ENGLISH-ABST:

A helical groove 1B is formed in the sliding surface 1A of a sliding bearing 1 over the entire axial region thereof. To establish the height of a peak 1a defined by the helical groove 1B, an imaginary reference line L extending parallel to the axis is formed which is determined such that the total cross-sectional area of all the peaks 1a is equal to the total cross-sectional area of all the valleys 1b when the helical groove 1B is considered in axial section. A height, as measured from the reference line L to the top 1a' of the peak 1a is chosen in the range of from 1 to 8 [mgr]m. The space created by forming the valleys 1b allows the supply of lubricant oil to be increased, thereby simultaneously achieving a reduction in the frictional resistance and the occurrence of an impact sound.

Source: [Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Patents](#) > [U.S. Patents](#) > [Utility, Design and Plant Patents](#) 

Terms: **patno=5704720** ([Edit Search](#))

View: **Custom**

Segments: Abst, Date, English-abst, Granted-date, Reissue-comment

Date/Time: Wednesday, June 22, 2005 - 9:54 AM EDT

[About LexisNexis](#) | [Terms and Conditions](#)

No Documents Found!*Patent Cases from Federal Courts and
Administrative Materials*

No documents were found for your search (5,704,720 or 5704720).
Click the "Edit Search" button below to try again. You may want to
try one or more of the following:

- Check for spelling errors.
- Remove some search terms.
- Use a less restrictive date range.
- Use more common search terms. "Suggested Words and Concepts" are displayed on the search form when you click on Edit Search.

[Edit Search](#)

[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2005 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

No Documents Found!*Patent, Trademark & Copyright
Periodicals, Combined*

No documents were found for your search (5,704,720 or 5704720).
Click the "Edit Search" button below to try again. You may want to
try one or more of the following:

- Check for spelling errors.
- Remove some search terms.
- Use a less restrictive date range.
- Use more common search terms. "Suggested Words and Concepts" are displayed on the search form when you click on Edit Search.

[Edit Search](#)

[About LexisNexis](#) | [Terms and Conditions](#)

Copyright © 2005 LexisNexis, a division of Reed Elsevier Inc. All rights reserved.

Query/Command : PRT SS 1 MAX 1 LEGALALL

1 / 1 PLUSPAT - @QUESTEL-ORBIT - image

Patent Number :

US5704720 A 19980106 [US5704720]

Title :

(A) Sliding bearing

Patent Assignee :

(A) TAIHO KOGYO CO LTD (JP)

Patent Assignee :

Taiho Kogyo Company, Ltd., Toyota [JP]

Inventor(s) :

(A) KUMADA YOSHIO (JP); HASHIZUME KATSUYUKI (JP); KAMIYA SOJI (JP)

Application Nbr :

US55358496 19960226 [1996US-0553584]

Filing Details :

PCT/JP95/00467 19950317 [1995WO-JP00467]

WO95/25904 19950928 [WO9525904]

Priority Details :

JP7396294 19940318 [1994JP-0073962]

WOJP9500467 19950317 [1995WO-JP00467]

Intl Patent Class :

(A) F16C-017/00

EPO ECLA Class :

F16C-033/10B2

US Patent Class :

ORIGINAL (O) : 384625000

Document Type :

Corresponding document

Citations :

US4400099; US4538929; US4561787; US4606653; US5071263; US5116144;

US5238311; AT385822 B; EP0155257 B1; EP0155257 A2; JP60-205014;

JP63-6215; JP63-30619; JP63-11530; JP2-142921; JP4-39461; JP5-6412;

JP5-8337; JP6-19850

Publication Stage :

(A) United States patent

Abstract :

A helical groove 1B is formed in the sliding surface 1A of a sliding bearing 1 over the entire axial region thereof. To establish the height of a peak 1a defined by the helical groove 1B, an imaginary reference line L extending parallel to the axis is formed which is determined such that the total cross-sectional area of all the peaks 1a is equal to the total cross-sectional area of all the valleys 1b when the helical groove 1B is considered in axial section. A height, as measured from the reference line L to the top 1a' of the peak 1a is chosen in the range of from 1 to 8 MU m. The space created by forming the valleys 1b allows the supply of lubricant oil to be increased, thereby simultaneously achieving a reduction in the frictional resistance and the occurrence of an impact sound.

1 / 1 LGST - @EPO

Patent Number :

US5704720 A 19980106 [US5704720]

Application Number :

US55358496 19960226 [1996US-0553584]

Action Taken :

20021015 US/RF-A

REISSUE APPLICATION FILED
EFFECTIVE DATE: 20020802
Update Code :
2003-22

1 / 1 CRXX - @CLAIMS/RRX

Patent Number :
5,704,720 A 19980106 [US5704720]

Patent Assignee :
Taiho Kogyo Co Ltd JP

Actions :
20020802 REISSUE REQUESTED
ISSUE DATE OF O.G.: 20021015
REISSUE REQUEST NUMBER: 10/210813
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3622

Reissue Patent Number:

1 / 1 INPADOC - @INPADOC

Patent Number :
US 5704720 A 19980106 [US5704720]

Title :
Sliding bearing

Inventor(s) :
KUMADA YOSHIO [JP]; HASHIZUME KATSUYUKI [JP]; KAMIYA SOJI [JP]

Patent Assignee (Words) :
TAIHO KOGYO CO LTD [JP]

Application Details :
US 553584/96-A 19960226 [1996US-0553584]

Priority Details :
JP 73962/94-A 19940318 [1994JP-0073962]
WO 9500467/95(JP)-W 19950317 [1995WO-JP00467]

Intl. Patent Class. :
F16C-017/00

1 / 1 LGST - @EPO

Patent Number :
US5704720 A 19980106 [US5704720]

Application Number :
US55358496 19960226 [1996US-0553584]

Action Taken :
20021015 US/RF-A
REISSUE APPLICATION FILED
EFFECTIVE DATE: 20020802

Update Code :
2003-22